# Z. HUNT.

## Improvement in Base-Burning Stoves.

No. 114,943. Patented May 16, 1871.

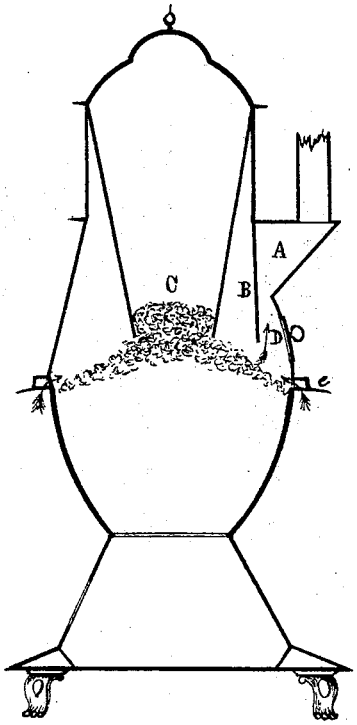


Fig. 1.

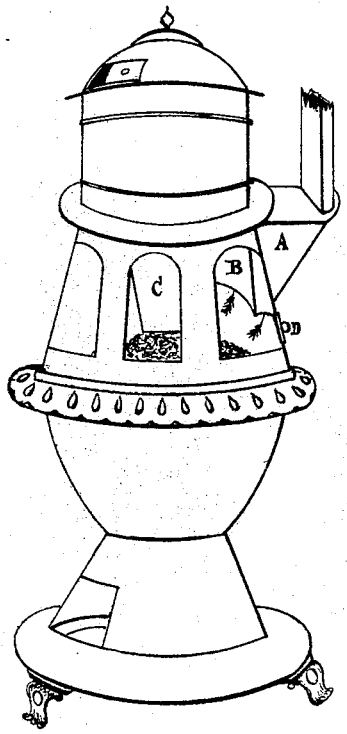


Fig. 2.

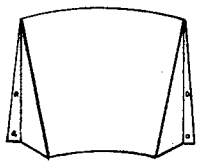

Fig. 3.

Witnesses.

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ZEBULON HUNT, OF HUDSON, NEW YORK.

Letters Patent No. 114,943, dated May 16, 1871.

## IMPROVEMENT IN BASE-BURNING STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

I, ZEBULON HUNT, of the city of Hudson, in the county of Columbia and State of New York, have invented certain Improvements in the Construction of Coal-Stoves and Furnaces, of which the following is a specification.

*Nature and Objects of the Invention.*

My invention consists in providing the exit or draught-pipe with a chamber, having a diaphragm or curtain-partition separating it from the fire-chamber, and extending down inside the case of the stove a little lower than the bottom of the reservoir, so as to improve the draught, and, at the same time, prevent the coal in the reservoir from igniting; also, in placing a cold-air register or ventilator at or very near the mouth or open bottom of this draught-pipe chamber, so as more perfectly to regulate and control the fire.

*Description of the Accompanying Drawing.*

Figure 1 is a transverse vertical section of my improved stove.

Figure 2 is a perspective view of the same.

Figure 3 is a front view of the curtain-plate detached.

*General Description.*

A is the exit or draught-pipe chamber, one side of which opens through the case of the stove, but is divided off or separated from the fire-chamber by the curtain-plate B, which extends down in front of it so as to leave an opening between the bottom of this plate and the case of the stove sufficient to accommodate the exit-draught.

C is the reservoir or magazine for coal to supply the fire.

D is a cold-air register or ventilator placed at or directly under the mouth of chamber A. It will be seen, by a reference to the drawing, that the bottom of the reservoir is a little above the bottom of the curtain-plate B. This renders the reservoir perfectly safe, so that there is no danger of the coal in it becoming ignited even in a direct-draught stove; since, as soon as the draught reaches the top of the coal in the fire-pot, it is attracted directly to the mouth of the chamber A and passes off into the exit-pipe, as shown by the darts in figs. 1 and 2.

When it is desired to dampen or reduce the fire cold air is admitted through register D in such quantity as may be desired. This register is located at or so near the mouth of chamber A that the cold air may be allowed to enter it simultaneously with the hot air, and thus immediately and thoroughly to check the draught or to reduce and regulate it and the fire, as desired. This is found to be the most effective and simple arrangement yet devised to control and regulate the fire in coal-stoves and furnaces.

The curtain-plate B, which forms the inner side of draught-chamber A, is cast in a single separate piece, as represented by fig. 3 of the drawing annexed, and bolted through flanges on its sides or edges to the body of the stove. Its form is such as to make it fit and sit close to the inside of the case at top, but to stand or hang off from it at bottom far enough to form an open flue or mouth for the draught and smoke to pass freely through it into chamber A, and thence into the pipe. The three outer sides of this chamber are cast with the shell of the stove.

What I claim as my invention is—

1. The diaphragm or curtain-plate B, when employed substantially in the manner and for the purpose herein set forth.

2. The combination and arrangement of plate B, chamber A, and ventilator D, substantially as and for the purpose set forth.

ZEBULON HUNT.

Witnesses:

WHEELER H. CLARKE,

SAMUEL EDWARDS.